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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,325	02/18/2000	Yujin Mori	016907/1050	8856

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FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

REITZ, KARL

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 12/29/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/506,325

Applicant(s)

MORI, YUJIN

Examiner

Karl R. Reitz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "Figure 1" and "Figure 2" have both been used to designate the figure that is labeled as Figure 1 (page 7 line 1 says "as shown in FIG. 2, but then goes on to describe figure 1 instead of figure 2). Further, on page 9, line 22 a reference is made to figure 2 suggesting that the figure shows the position of radiation of the exposure lamp. Figure 2 as labeled, is of a LCD display allowing the user of the apparatus to change settings; it is not of the position of radiation of the exposure lamp. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 78 (figure 1). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs mentioned in the description: **60** (page 11 line 22, page 13 line 20, page 19 line 8, page 20 line 24, page 22 line 23, page 23 line 23, page 26 line 13, page 28 line 1, page 30 line 2, page 31 line 16) and **72** (page 13 line 9, page 20 line 25, page 24 line 23, page 28 line 1, page 31 line 16) and **76b** (page 14 line 1 and 2) and **86b** (page 14 line 2) and **87a** (page 14 line 21, page 25 line 1, page 28 line 17) and **87b** (page 14 line 23, page 28 line 16) and **87c** (page 14 line 25, page 21 line 12, page 24 line 27) and **95** (page 16 line 1) and **96** (page 16 line 2). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 5 is objected to because of the following informalities: the word "reading" on page 36 line 27 should be "recording." Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 4 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Both claims use the phrase "mirror-image conversion." When explained in the description, a "mirror-image conversion" is shown in Figs. 8-11 (between parts A and B

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of each figure) and 14-17 (between parts A and B of each figure). In each of those figures the "mirror-image conversion" appears to be just a rotation of 270 degrees. Conventionally, a mirror image of an object is a reflection along a central axis, thus transposing each side, as would be seen in a mirror, which is not a rotation. Because it is not clear what exactly the conversion is (is it simply a rotation of 270 degrees or is some type of reflection involved?), the claims are rejected for failure to distinctly claim the invention.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu (5,461,459).

11. In accordance with claim 1, Muramatsu discloses an image forming apparatus 1 (figure 1). Muramatsu further discloses that the apparatus scans two originals and forms copy images of each original on both sides, obverse and reverse, of a medium; Muramatsu refers to this mode as one-side original/duplex copy mode (col. 12 lines 16-17). Muramatsu further discloses original documents with main and sub scan directions (figure 20 (a) and col. 2 lines 62-66).

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12. Muramatsu further discloses a setting means for setting the scanning direction of the originals; in Muramatsu's system, the CPU 2 controls the main scanning direction and CPU 3 controls the sub scanning direction (col. 5 lines 52-58 and col. 6 lines 3-6).

13. Muramatsu further discloses first scanning means for scanning the first original in the scanning direction; in Muramatsu's system, the CCD 16 (figure 1) reads the first original document and transmits the data to the image processing section 211 (col. 6 lines 17-21).

14. Muramatsu further discloses first recording means for recording the image data of the first original scanning; in Muramatsu's system, the image processing section 211 receives image data from the CCD 16 and then transmits the image data to the memory unit section (col. 6 lines 22-28).

15. Muramatsu further discloses first reading means for reading out the recorded image data without rotating the data; in Muramatsu's system, the image data of the first original is read out and sent directly to the print process section 40 without executing the rotation process (col. 11 lines 26-34).

16. Muramatsu further discloses first image forming means for forming the image data of the original on the obverse side of the medium; in Muramatsu's system, the image forming section 70, performs the image formation (col. 5 line 9).

17. Muramatsu further discloses second scanning means for scanning the second original in the scanning direction; in Muramatsu's system, the CCD 16 (figure 1) reads the second original document and transmits the data to the image processing section 211 (col. 6 lines 17-21).

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18. Muramatsu further discloses second recording means for recording the image data of the second original scanning; in Muramatsu's system, the image processing section 211 receives image data from the CCD 16 and then transmits the image data to the memory unit section (col. 6 lines 22-28).

19. Muramatsu further discloses second reading means for reading out the recorded image data without rotating the data or by rotating the data by 180 degrees; in Muramatsu's system, the image data of the second original is read out and its orientation is determined, if the orientation of the second original matches the first, then no rotation is performed, if it does not match, then a rotation of 180 degrees is performed (col. 11 lines 30-41).

20. Muramatsu further discloses second image forming means for forming the image data of the original on the reverse side of the medium; in Muramatsu's system, the image forming section 70, performs the image formation (col. 5 line 9).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu in view of Morikawa (5,649,033).

23. In accordance with claim 2, Muramatsu discloses all the limitations of claim 1, from which claim 2 depends.

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24. Morikawa further discloses allowing the directions of the originals to be portrait of a horizontally positioned original, landscape of a vertically positioned original, landscape of a horizontally positioned original, and portrait of a vertically positioned original (figure 38).

25. Muramatsu and Morikawa are combinable because they are from the same field of endeavor, namely copiers.

26. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the copying system of Muramatsu to handle originals as described by Morikawa.

27. The motivation for doing so would have been to allow Muramatsu's system to handle all possible orientations of original documents and thus output copies having the proper orientation.

28. Claim 3 is rejected under 35 U.S.C. 103 as being anticipated by Muramatsu in view of Morikawa.

29. In accordance with claim 3, Muramatsu discloses all the limitations of claim 1, from which claim 3 depends.

30. Morikawa further discloses allowing the directions of the originals to be portrait of a horizontally positioned original, landscape of a vertically positioned original, landscape of a horizontally positioned original, and portrait of a vertically positioned original (figure 38).

31. Neither Muramatsu nor Morikawa discloses expressly that if the directions of reading for the originals are the portrait of the horizontally positioned original or the landscape of the vertically positioned original, then second reading means then reads

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the image data by rotating the data 180 degrees or if the directions of scanning of the originals are the landscape of the horizontally positioned original or the portrait of the vertically positioned original, then second reading means then reads the image data without any rotation.

32. However, Muramatsu discloses rotating the originals by 0, 90, 180 or 270 degrees to properly orient the copies (col. 11 lines 30-55). Muramatsu further discloses detecting the top and bottom of the original and the portrait and landscape orientation of the original (col. 10 lines 11-12).

33. Thus, it would be obvious to a person of ordinary skill in the art to force the system of Muramatsu to rotate originals that are the portrait of the horizontally positioned original or the landscape of the vertically positioned original by 180 degrees and originals that are the landscape of the horizontally positioned original or the portrait of the vertically positioned original by 0 degrees.

34. Muramatsu and Morikawa are combinable for reasons already given above.

Claim Rejections - 35 USC § 102

35. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu.

36. In accordance with claim 4 Muramatsu discloses all the limitations of claim 1, from which claim 4 depends.

37. Muramatsu further discloses allowing the first recording means to record the image data of the first original by subjecting the image data to a mirror-image conversion (col. 6 lines 51-56).

38. Muramatsu further discloses allowing the second recording means to record the image data of the second original by subjecting the image data to a mirror-image conversion (col. 6 lines 51-56).

Claim Rejections - 35 USC § 102

39. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu.

40. In accordance with claim 5, Muramatsu discloses an image forming apparatus 1 (figure 1). Muramatsu further discloses that the apparatus scans two originals and forms copy images of each original on both sides, obverse and reverse, of a medium; Muramatsu refers to this mode as one-side original/duplex copy mode (col. 12 lines 16-17). Muramatsu further discloses original documents with main and sub scan directions (figure 20 (a) and col. 2 lines 62-66).

41. Muramatsu further discloses a first setting means for setting the scanning direction of the originals; in Muramatsu's system, the CPU 2 controls the main scanning direction and CPU 3 controls the sub scanning direction (col. 5 lines 52-58 and col. 6 lines 3-6).

42. Muramatsu further disclose a second setting means for setting a binding margin; in Muramatsu's system, the CPU 2 controls shifts in the image data to allow for a binding margin (col. 6 lines 43-48).

43. Muramatsu further discloses first scanning means for scanning the first original in the scanning direction; in Muramatsu's system, the CCD 16 (figure 1) reads the first original document and transmits the data to the image processing section 211 (col. 6 lines 17-21).

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44. Muramatsu further discloses first recording means for recording the image data of the first original scanning; in Muramatsu's system, the image processing section 211 receives image data from the CCD 16 and then transmits the image data to the memory unit section (col. 6 lines 22-28).

45. Muramatsu further discloses first reading means for reading out the recorded image data, providing the data with a binding margin, and without rotating the data; in Muramatsu's system, the image data of the first original is read out and sent directly to the print process section 40 without executing the rotation process, and the image process section provides the binding margin as set by CPU 2 (col. 11 lines 26-34 and col. 7 lines 4-8).

46. Muramatsu further discloses first image forming means for forming the image data of the original on the obverse side of the medium; in Muramatsu's system, the image forming section 70, performs the image formation (col. 5 line 9).

47. Muramatsu further discloses second scanning means for scanning the second original in the scanning direction; in Muramatsu's system, the CCD 16 (figure 1) reads the second original document and transmits the data to the image processing section 211 (col. 6 lines 17-21).

48. Muramatsu further discloses second recording means for recording the image data of the second original scanning; in Muramatsu's system, the image processing section 211 receives image data from the CCD 16 and then transmits the image data to the memory unit section (col. 6 lines 22-28).

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49. Muramatsu further discloses second reading means for reading out the recorded image data without rotating the data and providing a binding margin or by rotating the data by 180 degrees and providing a binding margin; in Muramatsu's system, the image data of the second original is read out and its orientation is determined, if the orientation of the second original matches the first, then no rotation is performed, if it does not match, then a rotation of 180 degrees is performed and the image process section provides the binding margin as set by CPU 2 (col. 11 lines 30-41 and col. 7 lines 4-8).

50. Muramatsu further discloses second image forming means for forming the image data of the original on the reverse side of the medium; in Muramatsu's system, the image forming section 70, performs the image formation (col. 5 line 9).

Claim Rejections - 35 USC § 103

51. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu in view of Morikawa.

52. In accordance with claim 6, Muramatsu discloses all the limitations of claim 5, from which claim 6 depends.

53. Morikawa further discloses allowing the directions of the originals to be portrait of a horizontally positioned original, landscape of a vertically positioned original, landscape of a horizontally positioned original, and portrait of a vertically positioned original (figure 38).

54. Muramatsu and Morikawa are combinable because they are from the same field of endeavor, namely copiers.

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55. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the copying system of Muramatsu to handle originals as described by Morikawa.

56. The motivation for doing so would have been to allow Muramatsu's system to handle all possible orientations of original documents and thus output copies having the proper orientation.

57. Claim 7 is rejected under 35 U.S.C. 103 as being anticipated by Muramatsu in view of Morikawa.

58. In accordance with claim 7, Muramatsu discloses all the limitations of claim 5, from which claim 7 depends.

59. Morikawa further discloses allowing the directions of the originals to be portrait of a horizontally positioned original, landscape of a vertically positioned original, landscape of a horizontally positioned original, and portrait of a vertically positioned original (figure 38).

60. Neither Muramatsu nor Morikawa discloses expressly that if the directions of reading for the originals are the portrait of the horizontally positioned original or the landscape of the vertically positioned original, then second reading means then reads the image data by rotating the data 180 degrees or if the directions of scanning of the originals are the landscape of the horizontally positioned original or the portrait of the vertically positioned original, then second reading means then reads the image data without any rotation.

61. However, Muramatsu discloses rotating the originals by 0, 90, 180 or 270 degrees to properly orient the copies (col. 11 lines 30-55). Muramatsu further discloses

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detecting the top and bottom of the original and the portrait and landscape orientation of the original (col. 10 lines 11-12).

62. Thus, it would be obvious to a person of ordinary skill in the art to force the system of Muramatsu to rotate originals that are the portrait of the horizontally positioned original or the landscape of the vertically positioned original by 180 degrees and originals that are the landscape of the horizontally positioned original or the portrait of the vertically positioned original by 0 degrees.

63. Muramatsu and Morikawa are combinable for reasons already given above.

Claim Rejections - 35 USC § 102

64. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Muramatsu.

65. In accordance with claim 8 Muramatsu discloses all the limitations of claim 5, from which claim 8 depends.

66. Muramatsu further discloses allowing the first recording means to record the image data of the first original by subjecting the image data to a mirror-image conversion (col. 6 lines 51-56).

67. Muramatsu further discloses allowing the second recording means to record the image data of the second original by subjecting the image data to a mirror-image conversion (col. 6 lines 51-56).

Contact Information

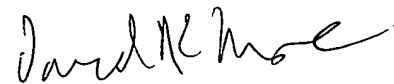
68. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl R. Reitz whose telephone number is (703) 305-8696. The examiner can normally be reached on Monday-Friday 8:00-4:30.

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69. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 305-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

70. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

KRR



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800